50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status and Critical Habitat for the Modoc Sucker ("Catostomus Microps")

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine the Modoc sucker, a small fish, to be an endangered species. This action is being taken because pure populations of Modoc suckers have been reduced to approximately 1,300 individuals in four streams. Formerly, the Modoc sucker was present in many tributary streams of the Pit River in Lassen and Modoc Counties of northeastern California. Habitat destruction and hybridization with the Sacramento sucker (*Catostomus occidentalis*) are the major reasons for the rapid decline of the Modoc sucker. Introduced brown trout (*Salmotrutta*) also prey on Modoc suckers in some areas. Critical habitat is included with this proposed rule. If finalized, the proposed rule would provide protection to populations of this species and its habitat under provisions of the Endangered Species Act. Comments and information are sought from the public, State, and Federal agencies.

DATES: Comments from all interested parties must be recieved by April 2, 1984. Public hearing requests must be received by March 16, 1984.

ADDRESSES: Interested persons or organizations are requested to submit materials and comments to Mr. Gail C. Kobetich, Endangered Species Office, U.S. Fish and Wildlife Service, 1230 "N" Street, 14th Floor, Sacramento, California 95814. Comments and materials relating to this rule are available for public inspection by appointment during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: For further information on the proposed rule contact Dr. Jack Williams, Endangered Species Office U.S. Fish and Wildlife Service, 1230 N Street, 14th Floor, Sacramento, California 95814; (916/440-2791, FTS 8/448-2791).

SUPPLEMENTARY INFORMATION:

Background

The Modoc sucker (*Catostomus microps*) was originally described from specimens collected in Rush Creek, Modoc County, California (Rutter, 1908). The Modoc sucker is a dwarf species of the family Catostomidae. Individuals begin to mature at 70 to 85 mm standard length with few individuals exceeding 160 mm standard length (Boccone and Mills, 1979). Martin (1972) describes the colors of the Modoc sucker as greenish-brown to deep grey olive above, lighter-colored on the sides with some light yellowish pigment below, cream-colored to white ventrally, and with the caudal, pelvic, and pectoral fins light yellowish-orange. Three dark lateral spots also characterize this species.

The historic range of the Modoc sucker was small tributary streams of the Pit River in Lassen and Modoc Counties, California. At present, they are found only in four small streams in Modoc County, California, characterized by low flows and large shallow pools with cover, soft sediments, and clear water (Moyle and Marciochi, 1975). The diet of Modoc suckers consists primarily of benthic organisms and detritus as described by Moyle and Marciochi (1975). They also reported that Modoc suckers usually mature at 3 years of age and live for approximately 5 years. Boccone and Mills (1979) describe spawning characteristics for this species.

The recent decline of the Modoc sucker has caused widespread concern in the scientific community. The Modoc sucker is classified as endangered by the American Fisheries Society (Deacon *et al.*, 1979). The State of California has recently recognized the severe plight of this species by changing its classification from rare to endangered. Mills (1980) provides further documentation that the Modoc sucker should be listed as endangered. A recent publication (Cooper, 1983) on the fishes of the Pit River system indicated that the Modoc sucker should be added to the Federal list of endangered species and pointed out the need for recovery actions.

The Modoc sucker was included in the Service's December 30, 1982, Review of Vertebrate Wildlife for Listing as Endangered or Threatened Species (47 FR 58454-60). In this review, the Modoc sucker was listed as a category 1 species indicating that the Service currently has substantial information on hand to support a proposed rule to list the species as endangered or threatened. On April 12, 1983, the Service was petitioned by the Desert Fishes Council to list the Modoc sucker. After evaluation of this petition, the Service found that the petitioned action was warranted. A notice of finding for this petition was published on June 14, 1983 (48 FR 27273-74).

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate 1982 amendments) set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1). These factors and their application to the Modoc sucker (*Catostomus microps*) are as follows.

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* In a 1978 California Department of Fish and Game survey, Modoc suckers were found in eight creeks: Washington, Hulbert, Turner, Willow, Ash, Dutch Flat, Johnson, and Rush. Modoc suckers probably inhabited more streams historically, although their numbers may never have been great because of the small, often intermittent, stream habitat. However, current information indicates that genetically pure Modoc suckers exist only in Hulbert, Washington, Turner, and Johnson Creeks. These four creeks are estimated to contain 1,300 Modoc suckers. Pure Modoc suckers have been eliminated from other creeks by hybridization with the Sacramento sucker as well as general habitat degradation. Sacramento suckers inhabit large streams and reservoirs, but ascend small trubutaries to spawn. Historically, natural instream barriers such as falls and steep gradient, prevented the movement of spawning Sacramento suckers into Modoc sucker habitat (Mills, 1980; Moyle and Marciochi, 1975). However, these natural barriers have been eliminated by siltation, channelization, and other agricultural activities. Cattle have compacted and denuded several meadow areas causing severe erosion and stream incision (Mills, 1980). Similarly, channelization has eliminated some natural instream barriers in Rush and Johnson Creeks. Channelization not only allows Sacramento suckers access to headwater areas but otherwise degrades habitat and results in reduced populations of most invertebrates and fishes (Moyle, 1976b). The presence of Modoc suckers is positively correlated with natural conditions, and the species does poorly in environments that have been degraded by physical habitat alteration or the presence of exotic species (Moyle, 1976c; Moyle and Marciochi, 1975).

In summary, the Modoc sucker has been eliminated from Dutch Flat, Willow, Ash and Rush Creeks and smaller tributaries to these creeks. Pure populations of the species are currently known only from Hulbert, Washington, Turner, and Johnson Creeks. Overgrazing by cattle, channelization, and water diversion have eliminated much of the former habitat and have precipitated the decline of the Modoc sucker. Physical habitat alteration has reduced habitat and eliminated natural barriers separating the Modoc sucker from the Sacramento sucker.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* The Modoc sucker is not known to be overutilized for any purpose.

C. *Disease or predation.* In addition to the problems of hybridization with the Sacramento sucker, other fishes not naturally occurring in Modoc sucker habitat have contributed to the decline of the Modoc sucker. Brown trout (*Salmo trutta*) have been introduced into the Pit River and tributaries inhabited by the Modoc sucker. These introductions have reduced numbers of Modoc suckers by predation (Moyle, 1976c).

D. *The inadequacy of existing regulatory mechanisms.* The State of California lists the Modoc sucker as endangered which protects the species from taking. However, this protection is not adequate because State classification does not provide for habitat protection or the formulation of recovery plans.

E. *Other natural or manmade factors affecting its continued existence.* The Modoc sucker is threatened by the loss of genetic uniqueness through hybridization with the closely related Sacramento sucker. Historically, the presence of instream barriers, such as falls, prevented the Sacramento sucker from invading the Modoc sucker habitat. Stream alterations have eliminated barriers on several streams and has led to the hybridization of the two suckers. Modoc sucker populations in several creeks have been lost due to hybridization with the Sacramento sucker and the remaining populations are threatened.

Critical Habitat

Critical Habitat as defined by Section 3 of the Act and at 50 CFR Part 424 means: (i) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed upon a determination that such areas are essential for the conservation of the species.

The Act requires that critical habitat be designated to the maximum extent prudent and determinable concurrent with the determination that a species is endangered or threatened. Critical habitat is being proposed for the Modoc sucker in portions of Hulbert, Washington, Turner, and Johnson Creeks in Modoc County, California. The areas proposed include approximately 12 miles of stream channel with a buffer zone of 50 feet on each side of the stream channel. The 50 foot buffer zone is deemed to be necessary because of the direct impact of activities affecting the immediate stream channel and the quality of the aquatic habitat for the species. The areas proposed as critical habitat satisfy all known criteria for the ecological, behavioral, and physiological requirements of the species. The species successfully reproduces in Hulbert, Washington, Turner, and Johnson Creeks. Viable populations existed in the other creeks near the proposed critical habitat prior to habitat degradation and invasion of Sacramento suckers. The areas proposed includes the entire known habitat of this species and modifications to critical habitat descriptions may be proposed in the future.

Section 4(b)(8) requires that for any proposed or final regulation which designates critical habitat a brief description and evaluation of those activities (public and private) which may adversely modify such habitat or may be affected by such designation, be provided.

1. Overgrazing of cattle in meadow areas adjacent to streams causes compacting and denuding of soils which leads to erosion and stream incision. This is presently occurring and may pose a serious threat.

2. Channelization, impoundment, and water diversion activities along streams could reduce available habitat and allow Sacramento suckers access to Modoc sucker spawning areas. This has occurred in the past but is not significant at the moment.

3. Introduction of exotic species which may compete with or prey on Modoc suckers. This is both a historical and a present threat.

4. Pollution of streams by silt or other pollutants would reduce the suitability of the stream environment for Modoc suckers. This is mainly a consequence of overgrazing, discussed above.

The Service is required to consider economic and other impacts of specifying a particular area as Critical Habitat. A final impact analysis will be prepared prior to preparing the final rule and will be used as the basis for deciding whether or not to exclude any area from critical habitat for the Modoc sucker.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by other Federal, State, and private agencies, groups, and individuals. The Endangered Species Act requires that recovery actions be carried out for all listed species and these are initiated by the Service following listing. The protection required by Federal agencies and taking and harm prohibitions are discussed in part below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Section 7(a)(4) requires Federal agencies to informally confer with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. When a species is listed, Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a "may affect" determination is expected, the Federal agency must enter into consultation with the Service.

The Service is notifying Federal agencies that have any jurisdiction over the land and water under consideration in this proposed action. These Federal agencies and other interested persons organizations are requested to submit information related to this proposed action.

There are several activities within the critical habitat involving Federal agencies which may have an impact on the habitat of the Modoc sucker. These activities include grazing leases and timber harvesting by the Forest Service. Moreover, the Allen Camp Unit, a reservoir project, was planned by the

Bureau of Reclamation on the Pit River but this impoundment was recently declared economically unfeasible and is considered halted by the Bureau of Reclamation. Such a reservoir would have provided excellent habitat for the Sacramento sucker and would have provided this species greater access to Modoc sucker habitat thus increasing the threat to that species. Sacramento suckers are known to readily ascend tributary streams to newly filled reservoirs (Wales, 1950).

The Act and its implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce listed species. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered animal species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species or to authorize incidental take pursuant to an approved conservation plan. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship that would be suffered if such relief were not available.

Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of any endangered or threatened species. Therefore, any comments or suggestions from the public, concerned governmental agencies, the scientific community, industry, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particular are sought concerning:

(1) Biological or other relevant data concerning any threat (or lack thereof) to the Modoc sucker;

(2) The location of any additional populations of the Modoc sucker and the reasons why any habitat of this species should or should not be determined to be critical habitat as provided by Section 4 of the Act;

(3) Additional information concerning the range and distribution of this species;

(4) Current or planned activities in the subject area and their possible impacts on the Modoc sucker; and

(5) Any forseeable economic and other impacts resulting from determining critical habitat.

Final promulgation of the regulations on the Modoc sucker will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Regional Director, U.S. Fish and Wildlife Service, Lloyd 500 Building, 500 Multnomah Street, Portland, Oregon 97232.

National Environmental Policy Act

In accordance with a recommendation from the Council on Environmental Quality (CEQ), the Service has not prepared any NEPA documentation for this proposed rule. The recommendation from CEQ was based, in part, upon a decision in the Sixth Circuit Court of Appeals which held that the preparation of NEPA documentation was not required as a matter of law for listings under the Endangered Species Act. *PLF v. Andrus* 657 F. 2d (6th Cir., 1981).

References

The following sources were used in the preparation of this proposed rule:

Boccone, V. M. and T. J. Mills. 1979. Spawning behavior and spawning substrat preference of the Modoc sucker, *Catostomus microps* (Rutter). California Dept. Fish and Game, Inland Fish. Endangered Species Program Spec. Publ. 79–2

Cooper, James J. 1983. Distributional ecology of native and introduced fishes of the Pit River system, northeastern California, with notes on the Modoc sucker. California Fish and Game 69(1):39–53.

Deacon, J. E., G. Kobetich, J. D. Williams, S. Contreras, and other members of the Endangered Species Committee of the American Fisheries Society. 1979. Fishes of North America endangered, threatened, or of special concern: 1979. Fisheries 4(2):29–44.

Martin, M. 1972. Morphology and variation of the Modoc sucker, *Catostomus microps* Rutter, with notes on feeding adaptations. California Fish and Game 58(4):277–284.

Mills, T. J. 1980. Life history, status, and management of the Modoc sucker, *Catostomus microps* (Rutter) in California, with a recommendation for endangered classification. California Dept. Fish and Game, Inland Fish. Endangered Species Program Spec. Publ. 80–6.

Moyle, P. B. 1976a. Inland fishes of California. University of California Press. Berkeley. 405 pp.

Moyle, P. B. 1976b. Some effects of channelization on the fishes and invertebrates of Rush Creek, Modoc County, California. California Fish and Game 62(3):179–186.

Moyle, P. B. 1976c. Fish introduction in California: history and impact on native fishes. Biol. Conserv. 9:101–118.

Moyle, P. B. and A. Marciochi. 1975. Biology of the Modoc sucker, *Catostomus microps*, in northern California. Copeia 1975(3): 556–560.

Rutter, C. 1908. The fishes of the Sacramento-San Joaquin basin, with a study of their distribution and variation. Bull. U.S. Bur. Fish 27:103–152.

Wales, J. H. 1950. Swimming speed of the western sucker, *Catostomus occidentalis* Ayres. California Fish and Game 36(4):433:434.

Author

The primary author of this rule is Dr. Jack E. Williams, U.S. Fish and Wildlife Service, Department of the Interior, Endangered Species Office, 1230 "N" Street, 14th Floor, Sacramento, California 95814; (916/440–2791).

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulation Promulgation

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93–205, 87 Stat. 884; Publ. L. 94–359, 90 Stat. 911; Pub. L. 95–632, 92 Stat. 3751; Pub. L. 96–159, 93 Stat. 1225; Pub. L. 97–304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*).

§ 17.11 [Amended]

2. It is proposed to amend § 17.11(h) by adding the following, in alphabetical order, to the List of Endangered and Threatened Wildlife under "Fishes."

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
•	•	•	•	•	•	•	•
Sucker, Modoc	*Catostomus microps*	U.S.A. (CA)	Entire	E		17.95(e)	NA
•	•	•	•	•	•	•	•

§ 17.95 [Amended]

3. It is further proposed to amend § 17.95(e) by adding critical habitat of the Modoc sucker as follows: (The position of the following critical habitat description in § 17.95(e) will be determined at the time of publication of a final rule).

* * * * *

Modoc sucker

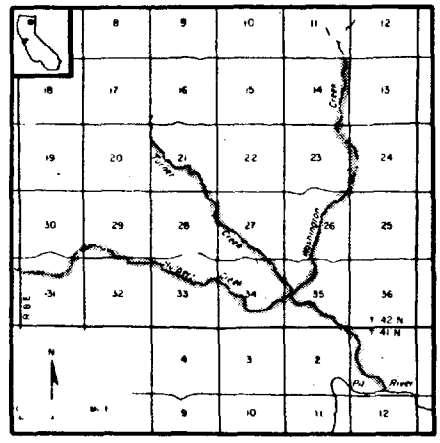
Catostomus microps

California: Modoc County.

1. *Turner Creek.* Approximately 4 stream miles and 50 feet on either side of the stream channel from the juncture of Turner Creek with the Pit River upstream to T42N, R8E, Section 21; including those areas of the stream channel in: T41N, R8E, Sections 1 and 2; T42N, R8E, Sections 21, 27, 28, 34, and 35.

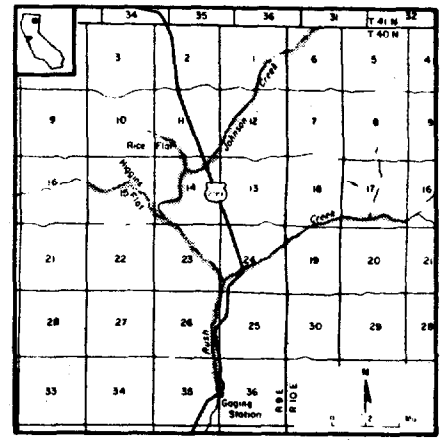
2. *Washington Creek.* Approximately 4 stream miles and 50 feet on either side of the stream channel from the juncture of Washington Creek with Turner Creek upstream to T42N, R8E, Section 14; including those areas of the stream channel in Sections: T42N, R8E, Sections 14, 23, 24, 25, 26, and 35.

3. *Hulbert Creek.* Approximately 4 stream miles and 50 feet on either side of the stream channel from the juncture of Hulbert Creek with Turner Creek upstream to T42N, R8E, Section 31; including those areas of the stream channel in: T42N, R8E, Sections 29, 30, 31, 32, 33, 34, and 35.



4. *Johnson Creek.* Approximately 4.5 stream miles and 50 feet on either side of the stream channel from the juncture of Johnson Creek with Rush Creek upstream to T40N, R10E, Section 6; including those areas of the stream channel in: T40N, R10E, Section 6; T40N, R9E, Sections 1, 11, 12, 14, 23, and 24. Unnamed tributary of Johnson Creek in Rice Flat, approximately 1 stream mile and 50 feet on either side of the stream channel from the juncture of this tributary with Johnson Creek upstream to T40N, R9E, Section 11; including those areas of the stream channel in: T40N, R9E, Sections 11 and 14. Unnamed tributary of Johnson Creek in Higgin[illegible] approximately 1 stream mile and 50 feet on either side of the stream channel from the juncture of this tributary with Johnson Creek upstream to T40N, R9E,, section 15; including those areas of the stream channel in: T40N, R9E, Sections 14 and 15.

5. *Rush Creek.* Approximately 5 stream miles and 50 feet on either side of the stream channel from the gaging station at the Highway 299 crossing upstream to T40N, R10E, Section 17; including those areas of stream channel in: T40N, R9E, Sections 24, 25, 26, 35, and 36; T40N, R10E, Sections 17, 18, and 19.



Known constituent elements include small clear, cool, gravel and rubble bottomed streams with riffle and pool areas at 4,000–5,000 feet in elevation with raparian vegetation and instream barriers at lower elevations.

* * * * *

Dated: December 20, 1983.

J. Craig Potter,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 84-2614 Filed 1-30-84; 8:45 am]

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